

# Notice of Allowability

Application No.

09/601,946

Examiner

Jonas N. Strickland

Applicant(s)

BENZ ET AL.

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## -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to the remarks filed on 9/24/03.
2. ☒ The allowed claim(s) is/are claims 1-9.
3. ☒ The drawings filed on 21 September 2000 are accepted by the Examiner.
4. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☒ All b) ☐ Some\* c) ☐ None of the:
    1. ☐ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☒ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
  - \* Certified copies not received: \_\_\_\_\_.
5. ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
  - (a) ☐ The translation of the foreign language provisional application has been received.
6. ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application. **THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

7. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
8. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
  - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
    - 1) ☐ hereto or 2) ☐ to Paper No. \_\_\_\_\_.
  - (b) ☐ including changes required by the proposed drawing correction filed \_\_\_\_\_, which has been approved by the Examiner.
  - (c) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No. \_\_\_\_\_.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the margin according to 37 CFR 1.121(d).

9. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

### Attachment(s)

- |  |   |
|--|---|
| 1 <input type="checkbox"/> Notice of References Cited (PTO-892)  | 5 <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)          |
| 2 <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                    | 6 <input type="checkbox"/> Interview Summary (PTO-413), Paper No. _____             |
| 3 <input type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No. _____  | 7 <input type="checkbox"/> Examiner's Amendment/Comment                             |
| 4 <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit of Biological Material | 8 <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
|  | 9 <input type="checkbox"/> Other  |

  
**STANLEY S. SILVERMAN**  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 1700

***Allowable Subject Matter***

1. Claims 1-9 are allowed.
2. The following is an examiner's statement of reasons for allowance: The instant application is in condition for allowance, because the cited prior art fails to disclose a process for preparing lithium transition metallates of the general formula:



The metallate is prepared by calcining an intimate mixture of oxygen-containing transition metal compounds and an oxygen-containing lithium compound, which has been obtained by treating a solid powdered transition metal compound, with a solution of the lithium compound and drying, characterized in that at least the  $\text{M}^1$  compound is used in the form of a powder with a specific surface area of at least  $10 \text{ m}^2/\text{g}$  (BET) and calcinations is performed in a moving bed.

Yazami et al. discloses electrode materials for rechargeable lithium batteries and their process of synthesis. The compound utilized by Yazami et al. corresponds to the formula  $\text{Li}_{ny}(\text{M}_{1-x}\text{M}'_x)_n\text{O}_{nz}$  in which  $n$  is 1 or 2, characterized by the fact that  $\text{M}$  and  $\text{M}'$  are identical or different and are chosen from the transition metals, by the fact that  $0 < x \leq 1$ ,  $0 < y \leq 1$ ,  $1.8 \leq z \leq 2.2$ , and by the fact that the compound has a specific surface area is between  $1.5$  and  $50 \text{ m}^2/\text{g}$ . The compound in which  $\text{M}$  and/or  $\text{M}'$  is chosen from Ti, V, Mn, Cr, Fe, Co, Ni, Zr, Nb, Ta, W, Mo and Re is particularly preferred. Calcining is done in an oxidizing atmosphere. The preparation of the mixture of precursors is done in a liquid medium, then dried, and then calcined. However, Yazami does not disclose calcinations being carried out in a moving bed and wherein at least the  $\text{M}^1$  compound is

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used in the form of a powder with a specific surface area of at least  $10 \text{ m}^2/\text{g}$  (BET).

Yazami et al. teaches wherein the product after calcining has a specific surface area between  $1.5$  and  $50 \text{ m}^2/\text{g}$  and not wherein the actually precursor has a specific surface area of at least  $10 \text{ m}^2/\text{g}$ .

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

### ***Conclusion***

3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jonas N. Strickland whose telephone number is 703-306-5692. The examiner can normally be reached on M-TH, 7:30-5:00, off 1st Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stanley Silverman can be reached on 703-308-3837. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-0661.



Jonas N. Strickland  
December 22, 2003